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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/198,751	11/24/1998	MASAYUKI HIGUCHI	SEL-119	2901

7590 03/22/2004

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SUITE 2850
CHICAGO, IL 60606

EXAMINER

TON, MINH TOAN T

ART UNIT	PAPER NUMBER
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2871

DATE MAILED: 03/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/198,751	HIGUCHI ET AL.	
	Examiner	Art Unit	
	Toan Ton	2871	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6,8,16-31,34,35 and 42-81 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6,8,16-31,34-35, 42-81 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

Claim Objections

1. Claims 43, 49 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Claim 43 recites similar subject matter as claim 42.

Claim 49 recites similar subject matter as claim 48.

Claim Rejections - 35 U.S.C. § 103

2. Claims 1, 6, 8, 42, 44-45, 48-70 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato et al (US 6002462) in view of Shimada (US 5777832).

See Figures 1-2.

Sato discloses the color filter 13 formed in the area of the contact hole 11b. Materials for the color filter commonly comprise a polymer (resin) with pigments, wherein it (the color filter) absorbs light.

The use of a liquid crystal display in electronic equipments, e.g., portable telephone, video camera, mobile computer, etc., is notoriously known and common in the art for advantages including light-weight, low power consumption.

Materials such as organic resin are common and known used for an insulating film. Thus, it would have been at least obvious to one of ordinary skill in the art to employ materials such as organic resin, as they are common and known in the art.

Various switching elements such as TFTs, FETs are known and common in the art. The use of one over another is at least an obvious variation.

The limitation not disclosed by Sato is as follows: “an upper surface of said pixel electrode is substantially flush with an upper surface of said light absorbing insulating material”.

Shimada discloses a TFT-LCD device comprising the top surface of the buried portion (comprising insulating material) at the same level as that of the pixel electrode, wherein such structure yields advantages such as the orientation of the liquid crystal molecules is not disturbed in an area corresponding to the contact hole, the light is not transmitted through an area where the light should not be transmitted [see col. 12, lines 3-10, at least Figure 2A]. Therefore, it would have been at least obvious to one of ordinary skill in the art to employ the pixel electrode having an upper surface substantially flush with an upper surface of the light absorbing insulating material for advantages such as the orientation of the liquid crystal molecules is not disturbed in an area corresponding to the contact hole, the light is not transmitted through an area where the light should not be transmitted.

3. Claims 16, 18, 22-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato in view of Shimada ('832) as applied to claims 1, 6, 8, 42, 44-45, 48-70 and further in view of Misawa et al (US 5250931).

A conventional peripheral driving circuit is generally composed of semiconductor chips such as an integrated circuit (IC). Misawa discloses that such conventional peripheral driving circuit suffers several problems such as low reliability for the connections, high manufacturing costs (col. 1, lines 30-68). Misawa solves the problems through the use of TFTs rather than

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semiconductor chips for the driving circuit (see col. 2, lines 7-12). Therefore, it would have been obvious to one of ordinary skill in the art to employ TFTs for the driving circuit for avoiding problems such as low reliability for the connections, high manufacturing costs.

4. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sato, Shimada ('832) and Misawa as applied to claims 16, 18, 22-27, and further in view of Kunii et al (US 5412493).

Kunii discloses an active matrix LCD device having LDD structure thin film transistors connected in series for achieving advantages such as suppressing leakage current. Therefore, it would have been obvious to one of ordinary skill in the art to employ an LDD structure thin film transistors connected in series for achieving advantages such as suppressing leakage current.

Allowable Subject Matter

5. Claims 2-5, 17, 20-21, 28-31, 34-35, 71-81 comprise allowable subject matter. A terminal disclaimer (w/ respect to copending applications 09/197767, 09/550598) must be filed to overcome obviousness double patenting rejections (see details of the double patenting rejections in the previous actions). Applicant has requested that these rejections be held in abeyance until the claims are otherwise found allowable over the prior art (since these are provisional double patenting rejections).

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Response to Arguments

6. Applicant's arguments with respect to all claims (with respect to the art rejection) have been considered but are moot in view of the new ground(s) of rejection.


It is noted that Applicant has requested that these rejections be held in abeyance until the claims are otherwise found allowable over the prior art.

Contact Information

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Toan Ton whose telephone number is (571) 272-2303.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

March 5, 2004


TOANTON
PRIMARY EXAMINER